

Notice of Allowability

Application No.

09/769,211

Examiner

Julian Mercado

Applicant(s)

CHUNG ET AL.

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3-15-04.
2. ☒ The allowed claim(s) is/are 1,3-9 and 15-27.
3. ☒ The drawings filed on 24 January 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with James Tak on July 15, 2004.

The application has been amended as follows:

In claim 5 at lines 3-6, which reads:

“a cell casing/holder plate having an aperture and a cut-away section defining a rim section located adjacent said aperture,

a fuel cell, and

a second interconnect plate”

has been replaced with:

--a second interconnect plate,

a single cell casing/holder plate located between the first and second interconnect plates, said cell casing/holder plate having an aperture and a cut-away section defining a rim section located adjacent said aperture, and

a fuel cell,--

Art Unit: 1745

Remarks

Claims 1, 3-9, 15-27 are pending, of which claims 23-27 are newly submitted. Claims 10-14 have been canceled by the present amendment.

Specification

The objection to the disclosure for minor informalities has been withdrawn.

Claim Objections

The objection to claims 20-22 for minor informalities has been withdrawn.

Claim Rejections - 35 USC § 102 and 103

In view of the examiner's amendment to the claims above and for the examiner's reasons for allowance to follow, the following rejections have been withdrawn:

The rejection of claims 1, 3, 5-7, 9, 20 and 21 under 35 U.S.C. 102(b) based on Warszawski et al. has been withdrawn.

The rejection of claims 1 and 3-9 under 35 U.S.C. 103(a) based on Faita et al. has been withdrawn.

Allowable Subject Matter

Claims 1, 3-9 and 15-27 are allowed. The following is an examiner's statement of reasons for allowance:

New independent claim 23 is notably modeled after dependent claim 10 (now canceled) including all the limitations of base claim 5 and intervening claim 9. Claim 23 is allowed consistent with the reasons set forth in the prior Office action for prior dependent claim 10, i.e. the prior art of record does not teach or render obvious the instant invention regarding, in a first embodiment, a single pair of openings in the outer interconnect plates forming the stack of fuel cells. Claim 23, and dependent claims 24-27 thereto, are allowed.

Independent claim 15 was indicated to be allowable in the prior Office action as the prior art of record does not teach or render obvious the instant invention regarding, in a second embodiment, a plurality of fuel cells positioned in a corresponding one cell casing/holder plate, i.e. a single cell casing/holder plate. As a matter of clarification, the prior Office action treated claim 15 as if it were a dependent claim that would be allowable if placed in independent form. This amendment is unnecessary as claim 15 was already previously presented in independent form. Claim 15, and dependent claims 16-19 thereto, are allowed.

Independent claim 5, as amended above in the Examiner's Amendment section, now recites, *inter alia*, a single cell casing/holder plate. This feature is precluded by both Warzawski et al. and Faita et al. who both teach dual cell casing/holder plate structures. The additional feature called for by the claim, i.e. "surface sealed to a surface of the rim section independently from other stack components" eliminates a second cell casing/holder plate or other stack components, such as an interconnect plate, which would "sandwich" the fuel cell to retain its surface seal to the cell casing/holder plate. Claim 5, and dependent claims 6-9 thereto, are allowed as the prior art of record does not teach or render obvious the instant invention regarding, in a third embodiment, a single cell casing/holder plate allowing for a fuel cell to be

positioned in a rim-section and surface sealed thereto independently from other stack components.

Additionally, the examiner notes that the language in claim 5 entered via the Examiner's Amendment section above drawn to the cell casing/holder plate being located "between the first and second interconnect plates" is set forth to allow for the "first interconnect plate / single cell casing/holder plate / second interconnect plate" structure as a repeatable tri-layered cell within the fuel cell stack.

As to independent claim 1, which recites a "means for mounting and surface sealing a cell independently from other stack components", claim 1 and dependent claims 3 and 4 thereto are allowed as limited to the corresponding structure described in the specification and consistent with the reasons for allowance set forth above for claim 5. This structure is viewed as a single cell casing/holder plate allowing for a fuel cell to be positioned in a rim-section and surface sealed thereto independently from other stack components.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

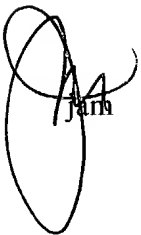
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

Art Unit: 1745

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.




Patrick J. Ryan
Supervisory Patent Examiner
Technology Center